

Application No. 09/599,040

Docket No. 22-0125

**Amendments to the Claims**

1-16 (Cancelled).

17 (Currently Amended):. The method of claim 18, 16, wherein transmitting the first header field further comprises transmitting a hopping beam guard band having have a duration encompassing an expected circuit switch downlink beam hopping delay.

18 (Currently Amended): ~~The method of claim 16,~~ A method for transmitting a communication frame, the method comprising:

transmitting a first header field including a first frame type field;

transmitting a first payload field;

transmitting a second header field smaller than the first header field and including a second frame type field; and

transmitting a second payload field;

the first payload field, first header field, second payload field, and the second header field being encapsulated in a single frame;

wherein transmitting the first header field comprises transmitting a first pseudorandom noise synchronization field, wherein transmitting the second header field comprises transmitting a second pseudorandom noise synchronization field, and wherein the first and second pseudorandom noise synchronization fields carry identical pseudorandom noise synchronization codes.

19 (Currently Amended): The method of claim 18, 16, wherein transmitting the first

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header field further comprises transmitting at least one of a first payload coding identifier and a first payload power gating identifier in the first payload field type indicator, and wherein transmitting the second header field further comprises further comprises transmitting at least one of a second payload coding identifier and a second payload power gating identifier in the second payload field type indicator.

20 (Original): The method of claim 19, wherein transmitting the first payload coding identifier comprises transmitting one of a heavy or light coding identifier, and wherein transmitting the second payload coding identifier comprises transmitting one of a heavy or light coding identifier.

21 (Currently Amended): ~~The method of claim 20, A method for transmitting a communication frame, the method comprising:~~

transmitting a first header field including a first frame type field;

transmitting a first payload field;

transmitting a second header field smaller than the first header field and including a second frame type field; and

transmitting a second payload field;

the first payload field, first header field, second payload field, and the second header field being encapsulated in a single frame;

wherein transmitting the first header field further comprises transmitting at least one of a first payload coding identifier and a first payload power gating identifier in the first payload field type indicator, and wherein transmitting the second header field

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further comprises further comprises transmitting at least one of a second payload coding identifier and a second payload power gating identifier in the second payload field type indicator;

wherein transmitting the first payload coding identifier comprises transmitting one of a heavy or light coding identifier, and wherein transmitting the second payload coding identifier comprises transmitting one of a heavy or light coding identifier;

wherein transmitting the first payload power gating identifier comprises transmitting one of a first payload power gate identifier and a frame power gate identifier, and wherein transmitting the second payload power gating identifier comprises transmitting one of a second payload power gate identifier and the frame power gate identifier.

22 (Currently Amended): A downlink frame processing module comprising:

an outer coder;

an inner coder coupled to the outer coder, the inner coder including a coded data output; and

a downlink frame organizer connected to the coded data output, wherein the downlink frame organizer packages coded data present on the coded data output into a single frame including:

a first payload field;

a first header field including a first frame type field;

a second payload field; and

a second header field smaller than the first header field and including a

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second frame type field;

wherein the first header field and the second header field include an identical pseudorandom noise synchronization code.

23 (Original): The downlink frame processing module of claim 22, further comprising a scrambler coupled to the inner coder and the outer coder.

24 (Original): The downlink frame processing module of claim 22, wherein the outer coder is a Reed-Solomon encoder and the inner coder is a Convolutional encoder.

25 (Original): The downlink frame processing module of claim 22, wherein the first header field further includes a hopping beam guard band having have a duration encompassing an expected circuit switching beam hopping delay.

26 (Cancelled).

27 (Original): The downlink frame processing module of claim 22, wherein the first payload field type indicator includes at least one of a coding identifier and a power gating identifier.

28 (Original): The downlink frame processing module of claim 27, further comprising a data memory coupled to the outer coder.

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29 (Original): The downlink frame processing module of claim 28, where the data memory stores 53-byte bytes ATM cells.

30-37 (Cancelled).